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| 10/532,248 | 04/22/2005 | Jingyuan Yu | SHA 133NP | 9068 |

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| EXAMINER | |
|---|---|
| KWIECINSKI, RYAN D | |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/532,248 | YU, JINGYUAN | |
| | Examiner | Art Unit | |
| | Ryan D. Kwiecinski | 3635 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *22 October 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-7* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☒ Other: *Exhibit A*.

## DETAILED ACTION

### *Specification*

The disclosure is objected to because of the following informalities:

Page 3, line 15, brief description of Figure 3 appears to be incorrect.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

**Claims 5-6** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

**Claims 5 and 6** both disclose structural characteristics which claim the sticking profile being spaced from the stiles or rails. The sticking profile cannot be structurally separated from the rails or stiles because it is disclosed as being a part of the rails or stiles and covered on the outsides by a veneer. Nowhere in the specification or the drawings does the Applicant disclose the sticking profiles having any sort of gap or disconnect between the actual profile and the stile or rail in which it is a part.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by US 5,540,026 to Gartland.**

**Claim 1:**

Gartland discloses a wooden door, comprises stiles (12, Fig.6) and rails (54,56, Fig.6) and core panels (14, Fig.6), wherein the stiles and rails comprise stile rail cores (stiles, Column 12, lines 23-32) and rails, Column 12, lines 41-42, Column 10, lines 22-24), edge bands (34, Fig.6) and sticking profiles (part of the stiles and rails), wherein the stile rail cores (Column 12, lines 41-42, Column 10, lines 22-24) and the core panels (14, Fig.6) are made of ordinary woods or artificial boards, the edge bands are made of high quality wood (Column 12, lines 54-55; See Column 12, lines 32-33; See Column 13, lines 49-51), the core panels (Column 12, lines 23-27) are made of wood of ordinary trees or artificial boards, and the outer part of the core panels are veneered with high quality veneers (Column 12, lines 32-33), wherein the sticking profiles are veneered with wood veneers containing high quality wood grains (the sticking profiles are one-

piece with the stiles and rails, therefore they are veneered with a high quality veneer as stated above).

**Claim 2:**

Gartland discloses the wooden door as described in Claim 1, wherein the sticking profiles and the stile rail cores are made integral, as a whole (the sticking profiles and the rails cores are made as one out of chipboard or low cost timber, See claim 1).

**Claim 3:**

Gartland discloses a method for veneering a sticking profile of a wooden door, comprising the steps of: applying resin glue on one side of a high-grade wood veneer, pasting onto an outer surface of the sticking profile of the wooden door; then putting the wooden door into a tamping machine having the same shape as the surface of the sticking profile, with the temperature adjusted to 60-120°C, and the pressure to 5-15kg/cm, applying the pressure for 2-3 minutes (Columns 9-10, lines 64-67 and 1-38, respectively).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

**Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,540,026 to Gartland in view of US 4,716,700 to Hagemeyer.**

**Claim 4:**

Gartland discloses the veneered wooden door as described in claim 1, but does not disclose the sticking profiles and the stile rail cores are made of different types of wood or artificial board.

Hagemeyer discloses the sticking profiles and the stile rail cores are made of different types of wood (Column 4, lines 58-60 and 63-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have constructed the sticking profiles and the stile rail cores from different wood materials taught by Hagemeyer in order to provide a sticking profile that has more strength and rigidity in order to properly restrain and secure the panels of the veneered wooden door of Gartland.

**Claim 7:**

Gartland discloses the framed-up door as described in claim 1, but does not disclose wherein the door is not unitary or integral.

Hagemeyer discloses a door which is not unitary or integral (Fig.7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have made the door of Gartland with separate panel

members as taught by Hagemeyer. It is notoriously well known to form a plural panel door. It would be obvious to have made the panels separate from the rails and stiles as taught by Hagemeyer.

In re Dulberg, 289 F.2d 522, 523, 129 USPQ 348, 349 (CCPA 1961) (The claimed structure, a lipstick holder with a removable cap, was fully met by the prior art except that in the prior art the cap is "press fitted" and therefore not manually removable. The court held that "if it were considered desirable for any reason to obtain access to the end of [the prior art's] holder to which the cap is applied, it would be obvious to make the cap removable for that purpose.")

***Response to Arguments***

Applicant's arguments filed 22 October 2007 have been fully considered but they are not persuasive.

Applicant states that the objections to the Specification are not understood. A copy of the specification filed to the Office on 22 April 2005, with the objection circled to better clarify the problem. Applicant specification may be formatted differently, etc.

The addition of "a framed-up panel" is merely an intended use of the panel and does not add structure to the wooden panel in the body of the claim.

*If the preamble merely states the purpose of intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction. [MPEP 2111.02 [R-3]II].*

Applicant argues the receiving block of Hagemeyer is made of high-quality solid wood; this argument is not considered persuasive. Although Hagemeyer may disclose a receiving block that is formed of an oak, the reference is used solely to disclose the stile/rail cores and the sticking profiles are formed of two *different* types of wood.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan D. Kwiecinski whose telephone number is (571)272-5160. The examiner can normally be reached on Monday - Friday from 9 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Canfield can be reached on (571)272-6840. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RDK

Robert Canfield
Primary Examiner

EXHIBIT X

1/PRTS

10/532248
JC06 Rec'd PCT/PTO 22 APR 2005

# VENEERED WOODEN DOORS AND A METHOD FOR VENEERING THEIR STICKING PROFILE

## TECHNICAL FIELD OF THE INVENTION

The present invention relates to wooden doors used in buildings, more particularly to a kind of veneered wooden doors and a method for veneering their sticking profile.

## BACKGROUND OF THE INVENTION

Wooden doors in current use are generally composed of stiles and rails and core panels. The timber of the door's outer part determines the name of the door, for example, black walnut doors, beech doors, maple doors. The more famed and precious the wood, the higher grade the wooden door will be. To save high quality timber (like red oak, cherry, maple, beech, black walnut, etc.), and reduce the manufacturing cost, at present high-grade wooden doors only use high quality timber for edge bands of the stiles and rails, stickings of the stiles and rails, as well as veneers, the main portions of the stiles and rails and the core panels use ordinary wood materials (soft miscellaneous or inferior materials such as fir, deal or poplar) or artificial boards (such as density board, flakeboard or fiberboard, etc.). However, the amount of wood used in the stickings takes about 30%-50% of all high quality timber used in the entire door; therefore, if this amount can be reduced and the wood can be partly replaced with ordinary timber or artificial board, a considerable amount of high quality timber resources can be saved, with the manufacturing cost of wooden doors greatly reduced.

Once the high quality wood of the stickings are replaced with ordinary wood or artificial boards, their outer parts shall be veneered with high quality wood veneers in the same way the stile and rail cores are veneered, so as to achieve an artistic unity in appearance. However, the stickings are usually of irregular shapes (especially those with edges or corners), ordinary veneering methods can hardly help to create an ideal result of artistic unity. Thus it is desired

to find a way to veneer the wooden doors' sticking profile, so as to make veneered wooden doors both pleasing in appearance and practical in use.

## SUMMARY OF THE INVENTION

The purpose of the present invention is to provide a veneered wooden door, whose stickings of the stiles and rails are ordinary wood material instead of high quality timber, so as to greatly lower the production cost of wooden doors.

The other purpose of the present invention is to provide a method for veneering the sticking profile of the wooden doors, so as to seamlessly integrate the surface of the stickings made of ordinary wood material with that of the stile rail cores, achieving a uniformed beautiful appearance.

To achieve the above purposes, the wooden door of the present invention mainly comprises stiles and rails and core panels, among which the stiles and rails comprises stile rail cores, edge bands and stickings. The wooden door of the present invention is characterized that the high quality timber of the stickings are replaced with ordinary timber or artificial boards, with their surface veneered with wood veneers containing high quality grains.

The stickings and the stile rail cores can be made of same wood of ordinary trees or artificial boards in accordance with the present of the invention, and integrated into a whole, with their surface veneered with wood veneers containing high quality grains.

The method for veneering the sticking profile of the veneered wooden door in accordance with the present invention comprises the following steps: applying resin glue on the backside of the high-grade wood veneers; pasting it on the surface of the stickings of the wooden door which is previously applied with resin glue; then putting the wooden door into a tamping machine having the same shape as the sticking profile, with the temperature at 60~120℃, and the pressure at 5~15kg/cm, applying pressure for 2~3 minutes.

Because the high quality wood of the stickings of the veneered wooden door in accordance

with the present invention is replaced with wood of ordinary trees or artificial boards, about 30%-50% of the high quality wood is saved, thus greatly lowers the manufacturing costs of the veneered wooden doors, as well as the valuable wood resources. On the other hand, the effect brought about by the replacement of the wood of the stickings upon the quality of the wooden door is almost negligible, which makes the present invention deserving to be spread and applied. In addition, The method for veneering the sticking profile (especially those with edges and corners) of the stickings of the wooden door in accordance with the present invention gives the wooden door of the present invention a perfect appearance, without any impact on the door's pleasing appearance, stability and durability.

## BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a front view of the veneered wooden door in accordance with the present invention.

Figure 2 is a section view along I-I of figure 1.

Figure 3 is a section view along I-I of figure 2.

FIG. 3 SHOWS A SECTION VIEW OF A DIFF. EMBODIMENT ALONG I-I OF FIGURE 1.

## DETAILED DESCRIPTION OF THE INVENTION

Through the following embodiments of the invention, further illustrations of the invention regarding the veneered wooden door and the method for veneering its sticking profile. However, the embodiments given shall not be deemed as limitations for restricting the range of application of the present invention.

### Example 1

As shown in FIG 1, a veneered wooden door in accordance with the present invention mainly comprises stiles and rails 1 and core panels 2. Also as shown in FIG 2, the main body 6 of the stiles and rails 1 are made of wood of ordinary trees, such as fir; the edge bands 5 of the

stiles and rails 1 are made of high quality wood, for instance red oak; the main body 7 of core panels 2 are made of artificial board, such as density board; the stickings 3 of the stiles and rails are made of density board, while the veneers of the outer parts of the stile rail cores and the stickings are of red oak. Since the stickings 3 are made of density board instead of red oak, the amount of high quality red oak used can be cut by about 30%-50%, thus greatly reduces the production costs.

Example 2

FIG 3 shows another embodiment of the present invention, the difference of this example with example 1 lies in the fact that high quality cherry wood is used in the edge bands 5 of the stiles and rails, while the stickings 3 and the stile and rail cores 6 adopt the same wood, namely density board, and are integrated into one part; while the veneers of the outer parts of which is of cherry wood, which is the same as that of the edge bands of the stiles and rails. Similarly, the amount of high quality cherry wood is also saved about 30%-50%, which greatly reduces the production costs.

Example 3

The outer part of the wooden door in accordance with the present invention uses the same high quality veneers as that of the edge bands of the stiles and rails. Firstly, apply evenly resin glue, for instance urea formaldehyde or water based glue, on one side of the high quality veneers, then paste it onto the surface of the stickings which is previously applied with resin glue, after that put the wooden door into a tamping machine (Model MGZ2500, Shanghai Xinguo Science and Technology Industrial Co., Ltd.) having the same shape as the irregular surface of sticking profile, the temperature is adjusted to 60~120℃, and the pressure to 5~15kg/cm$^2$, applying the pressure for 2~3 minutes.